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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/661,082

09/12/2003

John A. Moon

CV-0040

7101

7590

12/27/2005

Gerald L. DePardo
CyVera Corporation
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Wallingford, CT 06492

EXAMINER

LAVARIAS, ARNEL C

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,082

Applicant(s)

MOON ET AL.

Examiner

Arnel C. Lavarias

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/16/05, 10/12/05, 9/19/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 65-70 is/are allowed.
- 6) ☒ Claim(s) 24-60, 71-74 and 77-82 is/are rejected.
- 7) ☒ Claim(s) 61-64, 75, 76 and 83-87 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/16/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/19/05 has been entered.

Drawings

2. The drawings were received on 9/19/05. These drawings are acceptable.

Response to Amendment

3. The amendments to Claims 24, 31, 33, 41-42, 65, 71, 77 in the submission dated 9/19/05 are acknowledged and accepted.
4. The addition of Claims 84-87 in the submission dated 9/19/05 is acknowledged and accepted.
5. The amendments to Claims 34, 40 in the submission dated 10/12/05 are acknowledged and accepted.

Response to Arguments

6. The Applicants argue that, with respect to newly amended Claims 24, 65, 71, and 77, the combined teachings of Grot et al. and Baltes et al. fail to teach or reasonably suggest an optical identification element, an item having the optical identification element, a method for reading a code associated with the optical identification element, and a method for labeling an item, the elements and methods including a substrate being made of a substantially single material and having at least one diffraction grating embedded therein, the grating having a resultant refractive variation within the substantially single material, the grating providing an output optical signal indicative of a code when illuminated by an incident light signal propagating from outside the substrate. After reviewing the Grot et al. and Baltes et al. references, the Examiner agrees, and respectfully withdraws the rejections in Section 14 of the Office Action dated 7/15/05.
7. The Applicants similarly argue that, with respect to newly amended Claims 24, 65, 71, and 77, the combined teachings of Frankel and Ravkin et al. fail to teach or reasonably suggest an optical identification element, an item having the optical identification element, a method for reading a code associated with the optical identification element, and a method for labeling an item, the elements and methods including a substrate being made of a substantially single material and having at least one diffraction grating embedded therein, the grating having a resultant refractive variation within the substantially single material, the grating providing an output optical signal indicative of a code when illuminated by an incident light signal propagating from outside the substrate. After reviewing the Frankel and Ravkin et al. references, the Examiner agrees, and

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respectfully withdraws the rejections in Sections 15-17 of the Office Action dated 7/15/05.

8. It is additionally noted that, based on the amendments made to Claims 24, 65, 71, and 77, the provisional double patenting rejections in Sections 11-12 of the Office Action dated 7/15/05 have not been withdrawn since the amendments are very similar in scope to the recent amendments made to the claims in copending Application Nos. 10/661254 and 10/661031.

9. Claims 24-60, 71-74, 77-82 are now rejected as follows.

Claim Objections

10. Applicant is advised that should Claim 84 be found allowable, Claim 85 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d

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1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 24-35, 44-45, 50-55, 57-60, 77-79, 81-82 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 21-45 of copending Application No. 10/661254. Although the conflicting claims are not identical, they are not patentably distinct from each other because copending Application No. 10/661254 similarly recites an optical identification element for identifying an item and associated methods for reading a code with an optical identification element that is disposed on the item and labeling an item, as set forth in Claims 24-35, 44-45, 50-55, 57-60, 77-79, 81-82 of the instant application. Further, it is noted that 1) 'a synthesized chemical' or the substrate (See for example Claim 21 of copending Application No. 10/661254) generally corresponds to an item as recited in the instant application, and 2) it would have been readily apparent and obvious to one having ordinary skill in the art to perform the methods of reading the encoded optical identification element and encoded particle and labeling an item based on the recited structure provided for the optical identification element and encoded particle.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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13. Claims 24-60, 71-74, 77-79, 81-82 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 20-56, 58-94, 96-98, 114, 116-118, 134 of copending Application No. 10/661031.

Although the conflicting claims are not identical, they are not patentably distinct from each other because copending Application No. 10/661031 similarly recites an optical identification element for identifying an item and associated methods for reading a code with an optical identification element that is disposed on the item and labeling an item, as set forth in Claims 24-60, 71-74, 77-79, 81-82 of the instant application. Further, it is noted that 1) the recited attached 'chemical' or the substrate (See for example Claim 20 of copending Application No. 10/661031) generally corresponds to an item as recited in the instant application, and 2) it would have been readily apparent and obvious to one having ordinary skill in the art to perform the methods of reading the encoded optical identification element and encoded particle and labeling an item based on the recited structure provided for the optical identification element and encoded particle.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claims 24-29, 31, 41-42, 50, 60, 71-74, 77-79, 81 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 20, 26-44 of copending Application No. 10/763995. Although the conflicting claims are not identical, they are not patentably distinct from each other because copending Application No. 10/763995 similarly recites an optical identification element for identifying an item and associated methods for reading a code with an optical identification element that is

disposed on the item and labeling an item, as set forth in Claims 24-29, 31, 41-42, 50, 60, 71-74, 77-79, 81 of the instant application. Further, it is noted that 1) the recited alignment substrate (See for example Claims 20, 35 of copending Application No. 10/763995) generally corresponds to an item as recited in the instant application, and 2) it would have been readily apparent and obvious to one having ordinary skill in the art to perform the methods of reading the encoded optical identification element and encoded particle and labeling an item based on the recited structure provided for the optical identification element and encoded particle.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

15. Claims 65-70 are allowed.
16. Claims 61-64, 75-76, 83-87 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
17. The following is a statement of reasons for the indication of allowable subject matter:

Claim 65 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an item having an optical identification element disposed therein, as generally set forth in Claim 65, the item including, in combination with the features recited in Claim 65, a substrate being made of a substantially single material and having at least one diffraction grating embedded therein,

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the grating having a resultant refractive variation within the substantially single material, the grating providing an output optical signal indicative of a code identifying the item when illuminated by an incident light signal propagating from outside the substrate.

Claims 66-70 are dependent on Claim 65, and hence are allowable for at least the same reasons Claim 65 is allowable.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 9:30 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arnel C. Lavarias
Patent Examiner
Group Art Unit 2872
12/22/05

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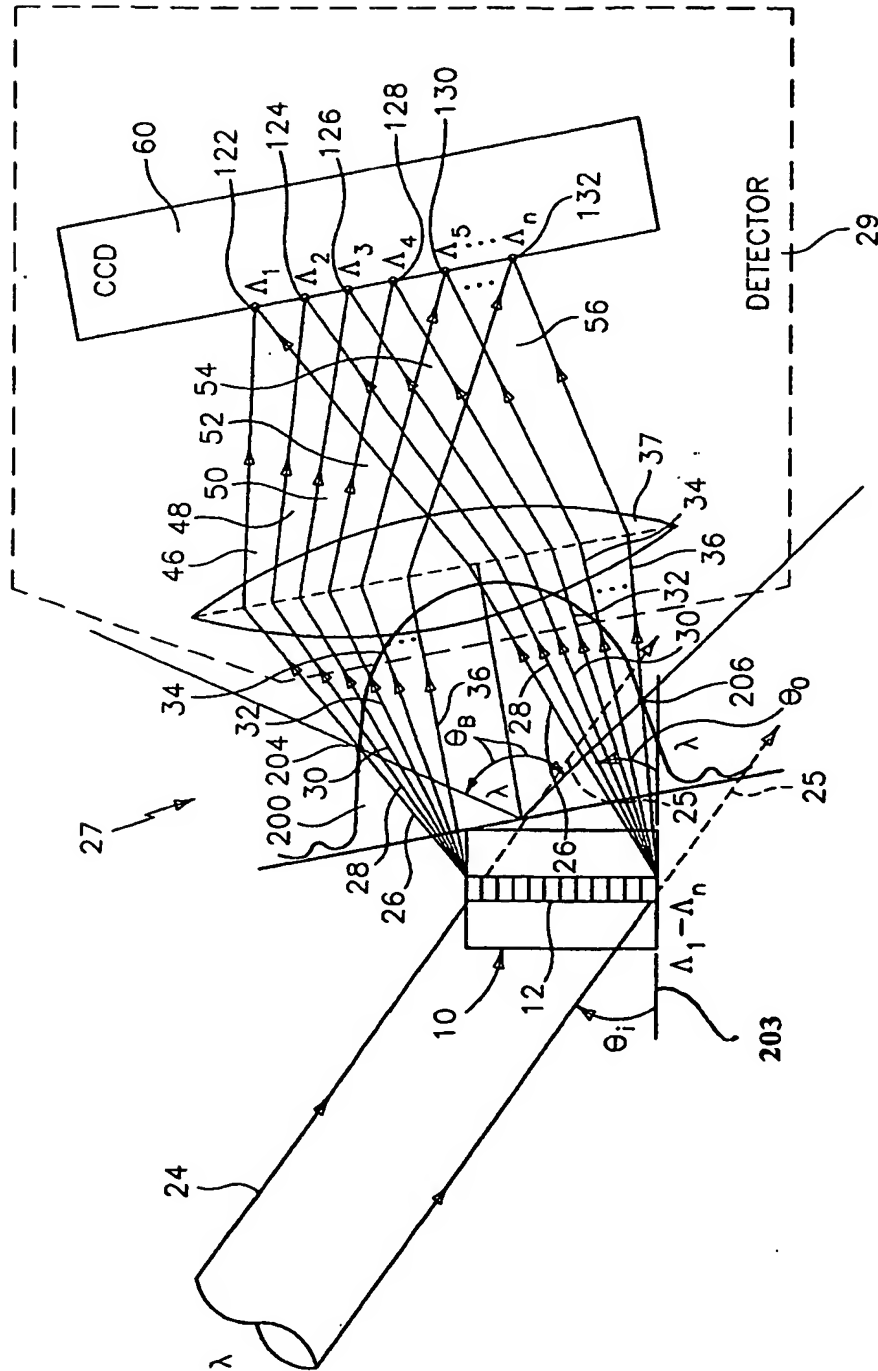


FIG. 9



Drawing Changes
Approved
12/19/05